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14. ABSTRACT

Development and fielding of the F-35A represents one of the priority defense programs for the U.S. The F-35 program was initiated in the early 1990s to provide the premier strike fighter aircraft to the Air Force, Marine Corps, and Navy, as well as international partners for the next several decades. Currently, the Air Force is scheduled to acquire and field over 1,700 F-35As over the next several decades; this basing action is only a part of the Air Force's program to assure availability of combat-ready pilots and maintenance personnel in the most advanced fighter aircraft in the world. This Environmental Impact Statement focuses on the analysis of alternative locations for and the Records of Decision for the Air Force's initial operational wing locations.

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F-35A, Environmental Impact Statement, Environmental Analysis, Record of Decision, Operational Location, US Air Force

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From:

William Boardman

Sent:

Friday, July 12, 2013 2:52 PM

To:

Germanos, Nicholas M Civ USAF HQ ACC/A7NS

Subject:

NO to F-35 in Vermont #15

... because the F-35 is a failure that has cost too much, taken too long, and still doesn't work right [see below].

William Boardman

Air Force Stonewalls F-35 Defects

VERMONT "LEADERS" TURN DEAF EAR TO F-35 NOISE AND HEALTH ISSUES

By William Boardman

None of the more notable supporters of basing the nuclear-capable F-35 stealth fighter-bomber at Burlington Airport in Vermont, not one, had the courage to tell the Burlington Board of Health that the F-35 would be good for the community's health. The available evidence points strongly to the F-35 being bad for people's health.

The Board of Health hearing http://7d.blogs.com/offmessage/2012/11/is-the-f-35-harmful-to-health-burlington-board-seeks-

answers.html?utm_source=Seven+Days+Email+Newsletters&utm_campaign=f300a4de45-Daily_7_Wednesday_11_28_12&utm_medium=email> on November 27 heard three health experts, two of whom criticized the plane's health impact, while the third called it "a very murky area." Of the dozen members of the audience of about 50 who spoke, all objected to the plane's deleterious effects.

The F-35 has faced local opposition for almost three years, opposition that has grown since the U.S. Air Force released a draft environmental impact statement in the spring of 2012, provoking widespread objections to its assumptions, methodology, and conclusions. To date, the Air Force continues to withhold documents relevant to the criticisms.

The final impact statement is now scheduled for release in mid-January 2013, with the final basing decision expected a month or so later. If the F-35 is based in Burlington, it's not expected to arrive before 2020, about 20 years since the world's most expensive weapons program – approaching \$400 billion – began. So far it is about a decade behind schedule and 100% over budget.

The F-35 program has been troubled for years, to the point where some in Washington are looking to cut their losses http://www.bizjournals.com/dallas/blog/morning_call/2012/11/f-35-fighter-jet-may-be-target-of.html. According to the New York Times of November 28, budget http://www.nytimes.com/2012/11/29/us/in-federal-budget-cutting-f-35-fighter-jet-is-at-risk.html?pagewanted=all cutters are eyeing this expensive program that is still in the testing phase and still years from full deployment. Two days later the Times reported http://www.nytimes.com/2012/12/01/business/us-to-pay-3-8-billion-for-next-lot-of-f-35-jets.html that the Pentagon had agreed in principle to pay \$3.8 billion for 32 F-35s "after a year of tense negotiations over how to lower costs."

Sales of the F-35 continue to face uncertainty as budget-strapped countries have second thoughts, most recently Canada http://www.cbc.ca/news/politics/story/2012/11/30/pol-lawson-committee-f35-stealth-options.html?cmp=rss, where officials withheld http://www.ottawacitizen.com/news/Defence+officials+dodged+questions+before+election/7638967/story.html> cost data until after the most recent election.

Public Officials Duck Public Meetings

No one from the Air Force came to the board of health hearing, nor did anyone from the Pentagon or the plane's maker, Lockheed Martin. None of the Vermont congressional delegation appeared or sent representatives – not Democratic Senator Patrick Leahy who says he wants the F-35 in Burlington, not independent Senator Bernie Sanders of Democratic Rep. Peter Welch, who say the same thing. Outspoken supporter Governor Peter Shumlin was absent and so was more tepid supporter Burlington Mayor Miro Weinberger, both Democrats.

Chris Hurd http://www.chrishurdvt.com/, a local real estate agent who attended the hearing, published his observations afterward:

"And what of our elected officials? Not a single public hearing to allow those most affected by the basing to shine a spotlight upon grievances and health concerns has been held by Senators Leahy, Sanders, Rep. Welch, or our Governor.

"No official calls for transparency, no inquiries into the stunning lack of data and no one from the delegation willing to even QUESTION this basing. Shame upon all of you."

Lacking any high-ranking profiles in courage, someone in authority apparently decided that a Vermont National Guard (VTANG) Lt. Colonel would be a sufficient stand-in for the AWOL leaders. That's how the board ended up hearing often unreliable information from Col. Luke "Torch" Ahmann, whose most relevant experience had been piloting F-16s for the past dozen years.

Costumed in his flight suit for his ground appearance before a civilian audience, Col. Ahmann tried reassuring the group that the F-35 noise level "is probably going to be quite similar" to the already objectionable noise of the F-16 – even though the Air Force impact statement says the F-35 is twice as loud as the F-16. Some object to this assessment, but the Air Force refuses to release documentation that might resolve it.

Air Force Case Flawed, Data Withheld

Working from a Power Point presentation, the colonel also argued that aircraft noise has been "proven as compatible with residential use," even though the Air Force impact statement estimates more than 1,000 homes will be rendered "incompatible with residential use" by the proposed F-35 base. Additionally, about 100 homes have already been destroyed as part of a Federal Aviation Administration program designed to clear inhabitants from excessive noise_______zones.

The board of health chair, Dr. Austin Sumner http://www.zoominfo.com/#!search/profile/person?personId=1278597698&targetid=profile, is a practicing physician and the Vermont state epidemiologist. At the hearing he expressed http://www.northcountrypublicradio.org/news/story/20970/20121128/burlington-board-of-health-holds-f-35-hearing concern that his board's limited and advisory authority applies only to Burlington and not the two communities next to the airport:

"There are three separate communities that will be…potentially adversely affected by this plane. That's Winooski, Burlington and South Burlington....

There is only one department or agency that really has multi-jurisdictional authority and that is the Vermont Department of Health and I have not to date heard their position on this matter. They should be the lead organization investigating the public health effects related to what could affect 7000-9000 members of those three communities."

The state health http://healthvermont.gov/admin/about/Biographies.aspx , has been unresponsive to public requests to assess the potential health impact of the F-35. An open letter http://www.stopthef35.com/open-letter-harry-chen-md-commissioner-health-state-vt to Dr. Chen in September, written at the behest of Dr. Sumner, has gone unanswered.

Dr. Chen has also ignored media inquiries wondering why the Vermont Health Dept. is ignoring a Vermont health issue at the moment when prevention would do the most good.

No representative of the Vermont Department of Health attended the F-35 hearing, so it remains unclear why a request on behalf of the state epidemiologist continues to be ignored by the state health commissioner, even though the state's website " recognizes at least some of the damaging health effects of noise."

Air Force Tries to Get By With Decades-Old Study

In his testimony to the board, Les Blomberg, who is the executive director of the state's Noise Pollution Clearinghouse http://www.nonoise.org/ in Montpelier [website last updated January 2000], told the board that the Ai Force had failed to respond to his requests for clarifying information. Such bureaucratic silence, Blomberg suggested, "only happens when they have something to hide."

In a follow-up letter http://f35insouthburlington.blogspot.com/2012/11/noise-expert-identifys-key-inaccuracies.html to the health board November 30, Blomberg identified other inaccuracies in Col. Ahmann's presentation of the Air Force position, in particular the government's false claim that "there is no scientific basis for a claim that potential health effects exist for aircraft time average sound levels below 75 dB [decibels]." Pointing out the intellectual dishonesty of the claim, Blomberg wrote http://f35insouthburlington.blogspot.com/2012/11/noise-expert-identifys-key-inaccuracies.html:

"You should note that the conclusion is based on 20+ year old paper based on research that was probably more than 25 years old. In the last 25 years, while the human body's response to noise has not changed, our understanding of it has changed greatly.

"In the last 10 years, research has shown health effects from noise http://www.ilsr.org/?s=noise, including the WHO http://www.stopthef35.com/world-health-organization-burden-disease-environmental-noise statement that was on my handout."

In 2011, the World Health Organization (WHO) Regional Office for Europe published a 126-page study http://www.stopthef35.com/sites/default/files/WHO%20Burden%20of%20Disease-Noise.pdf titles "Burden of disease from environmental noise," which was certainly as available to the Air Force for its environmental impact statement as research that was decades out of date. The Foreword of the study offers a clear context in which the F-35 should be assessed for its health impact:

"Public health experts agree that environmental risks constitute 24% of the burden of disease. Widespread exposure to environmental noise from road, rail, airports and industrial sites contributes to this burden. One in three individuals is annoyed during the daytime and one in five has disturbed sleep at night because of traffic noise.

"Epidemiological evidence indicates that those chronically exposed to high levels of environmental noise have an increased risk of cardiovascular diseases such as myocardial infarction. Thus, noise pollution is considered not only an environmental nuisance but also a threat to public health."

Most Ignore Class War Aspect, But It's Real

Blomberg also addressed the class warfare aspect of the Air Force/Pentagon/Congressional push for the Vermont F-35 base, as reported by Kevin Kelley http://www.healthgrades.com/physician/dr-john-reuwer-yj84k for Seven Days:

"Low-income and nonwhite Vermonters account for many of those who will be most affected by the noise of the F-35, he observed. "Most people living near airports are those who can't afford to leave," Bloomberg said."

Also testifying before the health board, Dr, John Reuwer http://www.healthgrades.com/physician/dr-john-reuwer-yj84k, a South Burlington primary care physician reinforced the availability to the Air Force of plenty of recent research demonstrating the harmful effects of aircraft noise. To bring the point home, he added, "there's almost no evidence that the effect of these planes is harmless. [emphasis added]"

No one has offered evidence that the F-35 is beneficial to a person's health.

The third expert to testify, Dr. Mark Gorman http://providers.fletcherallen.org/Default.asp?P=Y&providerType=8&PageID=PHY001380, a neurologist and associate professor at the University of Vermont, limited his comments to the possible connection of aircraft noise to strokes, calling it "a very murky area" while acknowledging the connection was credible http://www.wptz.com/news/vermont-new-york/burlington/Board-seeks-information-about-jet-and-health/-/8869880/17573004/-/item/1/-/xrrd69z/-/index.html.

Main Vermont Media Fail to Inform

For an issue with as much local and national significance, mainstream media coverage was even thinner than usual. Kevin Kelley of Seven Days provided the most detailed (and only) print report , Sarah Harris of North Country Public Radio was alone with more than bulletin radio coverage, and television provided an unsigned, careless story on NBC-TV affiliate WPTZ. The rest of Vermont's media were silent, including the Burlington Free Press, Vermont Public Radio, and both the CBS and FOX TV affiliates.

This kind of coverage of a Tuesday meeting was not for lack of news value, or for competing stories of greater significance. As Chris Hurd wrote in his post-hearing write-up of the public health board:

"The most revealing question during last Tuesday night's F-35 Burlington Board of Health Hearing was posed by the Board Chairman to the two representatives of the Vermont Air National Guard. The Chair asked if information about the effects of noise could be provided to the BOH. The VTANG reply was a deafening 'no'.

"The Chair pressed asking 'why not?' VTANG countered 'that information rests in the hands of the United States Air Force.'

"The Chair continued asking when could the Board of Health receive this information and VTANG's reply was louder than the F-35's themselves: VTANG answered the pertinent information might not be made available until AFTER the USAF Environmental Impact Study for the F-35 Basing is finalized on January 15th, 2013.

"In other words, nearly THREE years into this debate, we had representatives from VTANG unable to give direct answers to the [health board] questions on basic information necessary for them to make their determination of the health effects of this plane until AFTER the basing decision has been set."

Based on the evidence to date, the F-35 stealth fighter has a lot of stealth supporters, stealthy apparently for lack of a credible argument based on reliable information.

From:

Sent: Friday, July 12, 2013 1:39 PM

To: Germanos, Nicholas M Civ USAF HQ ACC/A7NS

Subject: F35 in Burlington, VT

(This letter is also being submitted to the Vermont media, it's legislative representatives, as well as the media.)

Would someone please inform me as to what plausible rationale our governor and legislative representatives could have for backing the F-35 at Burlington?

It's now been clearly demonstrated that harmful noise generated by the F-35 would affect a far larger area than specified in earlier estimates.

If the F-35 were approved for siting in Burlington, large numbers of affordable homes would be razed, low-income families displaced, and the land rezoned for commercial use. Senator Pat Leahy's cousin-in-law, as one of the region's biggest commercial developers, would be in a position to reap great financial benefit. Is this only a coincidence?

There are strong indications from Pentagon sources that the selection process was intentionally manipulated to ensure Burlington would be the top choice.

In case of an urgent national emergency, how would the military propose to rapidly truck armaments for the F-35 from the nearest depot – Fort Drum, NY – over the Adirondacks? In the middle of winter? Really?

Government sources refuse to release definitive estimates as to how many Vermonters, as opposed to outside personnel, would be employed long-term and full-time as the result of the basing of the F-35. That such information is considered 'classified' is patently absurd.

Given that residents of the two communities that would be most affected by the plane – South Burlington and Winooski – have consistently opposed siting the plane here, why does the government still insist on shoving this pork-laden boundoggle down our throats?

Finally, to those who accuse F-35 opponents of being unpatriotic, you should know better. Patriotism is not about blindly accepting whatever your government tells you is best. There have been far too many previous reminders that's not always the case.

The decision whether to site the F-35 here will have wide-ranging enormous consequences for years to come. For our well being and the well being of our children, we have an obligation to stop this madness now.

Steven Fox

From:

William A. Wood

Sent:

Friday, July 12, 2013 2:10 PM

To:

Germanos, Nicholas M Civ USAF HQ ACC/A7NS

Cc:

bernie_sanders@sanders.senate.gov; patrick_leahy@leahy.senate.gov;

peter.welch@house.gov

Subject:

I oppose basing the F-35 in VT

I'm a physician in Putney/Brattleboro, and the father of two young children here.

I oppose siting the F-35 in VT, or, really, anywhere.

It's too expensive, both for our own military budget (other priorities will suffer), and for potential overseas customers.

It's too noisy, and will decrease property values in Vermont.

Citizens don't want it, as reflected in recent public local government hearings in So. Burlington and Winooski (public testimony in So. Burlington ran 2:1 against the F-35, despite that City Council's unrepresentative vote in favor of it).

Sincerely,

Bill Wood MD

From:

DDECF Rousseau

Sent:

Saturday, July 13, 2013 7:11 PM

To:

Germanos, Nicholas M Civ USAF HQ ACC/A7NS

Subject:

VT F-35

Hello,

I am writing in support of the F-35 basing in Vermont.

It frustrates me that a "few" people in one county in the state of Vermont seem so ignorant about a cause that strongly affects and effects the rest of Vermont, as well as New York and our country.

The F-35 program is vital to the members of the Vermont Air Guard for its mission, their members' employment and recognition of their hard work.

The F-35 program is also important to the communities around the Vermont Air Guard base as the members bring money into the area during training weekends/days for food, housing and entertainment.

These monies, the employment opportunities and the pride extend beyond our state border. Members travel from New York, New Hampshire and Massachusetts to work at the 158 Fighter Wing.

The 158th reputation also extends beyond our state, across the country and around the world, even prior to Sept 11, 2001. The unit has had made significant impacts and contributions in war time operations (Iraq, Kuwait, and Afghanistan) homeland defense (Operation Noble Eagle) and natural disasters (Ice Storm of 1998, and Hurricane Irene, as well as recent flooding).

The "few" people living near an established airport, effected by a little noise, willing to jeopardize the livelihoods of hundreds of thousands of others should be ashamed of themselves.

We are all just tiny specks in a much larger picture. The F-35 program would ensure the 158 FW of the Vermont Air Guard will continue to have a positive contribution to the global picture well into the future.

I hope the Air Force selects Vermont for its basing of the F-35. I have 100% confidence they will not be disappointed. The Vermont Air Guard will make them proud!

Vermonters lead the way!

DJ Rousseau

Igor Zbitnoff

July 12, 2013

Nicholas Germanos, HQ ACC/A7PS 129 Andrews St., Suite 332 Langley AFB, VA 23665-2769

Dear Mr. Germanos:

I live in Winooski, Vermont, and I and my neighbors would be among those who would be most seriously impacted by the basing of the F35 in the Burlington area. There would be negative economic, environmental, and health effects for all of us. In terms of commenting on the Environmental Impact Statement dated May, 2013, I have enclosed 4 items which make comments with which I am aligned.

Item 1: A letter to you dated July 7, 2013, from former and current members of the South Burlington City Council.

Item 2: A leaflet that is a reminder that the current EIS is lacking in particular a discussion of recent research on health_risks of local basing of the F35.

Item 3: A leaflet entitled "Burlington Air Guard Station F-35A Basing Issues." Parts I A and I B make particular reference to the Environmental Impact Statement.

Item 4: A Department of Defense Clear Zones and Accident Potential Zones for Burlington International Airport. I and my neighbors live in an area designated APZ 1. Given that the F35 would have an expected crash rate much higher than the F-16

Letter to Mr. Germanos - page 2

or commercial aircraft, I am very concerned about being in the __ crash zone.

Recently the City of Winooski took a stand against basing the F35 in the Burlington area. They represented me among many others when they took that stand.

I feel very strongly that basing the F35 in the Burlington area would be bad for me and the many thousands in the 65 DNL zones and the crash zones for economic, environmental, and health reasons. Please take my comments seriously. Also please note that, if necessary, I will engage in court action to prevent the basing of the F35 in the Burlington area.

Sincerely

Igor Zbitnoff

2015 NOTE - ITEM

7 July 2013

Mr. Nicholas Germanos, HQ ACC/A7PS 129 Andrews St., Suite 332 Langley AFB, VA 23665-2769

Dear Mr. Germanos,

Thank you for the opportunity to comment on the United States Air Force F-35A Operational Basing Environmental Impact Statement dated May 2013, regarding basing the F-35A at the Burlington Air Guard Station.

After reading the revised report, it is clear that this draft also contains substantive errors, similar or greater in magnitude than the errors in the March 2012 report, which caused the AF to re-write sections of the draft EIS. Additionally, there are new errors and omission in the revised report. The errors found relate to the analysis, methodologies and/or information, which is factually inaccurate, analytically inadequate, and that question scientific and technical conclusions.

The most egregious substantive error relates to the noise effects on the health of people, in particular, children. Just as the 2012 draft EIS used 12-year old census data and thus underestimated the impact on the population by over a thousand people, this revised draft uses a 20-year old and a 16-year old study regarding the negative health effects of noise. Well over a hundred more recent studies show negative health effects from noise, in particular, aircraft noise. And there is overwhelming evidence from over 20 studies that noise impairs the cognitive development of children. More time needs to be devoted to reviewing these studies. NOTE: the revised report spends 19 ½ pages discussing the noise effects on animals; and spends only 2 ¾ pages discussing the noise effects on children.

- The revised report incorrectly states on pages C-27 and NS-30, "In summary, there is no scientific basis for a claim that potential health effects exist for aircraft time average sound levels below 75 dB." According to the revised report, the AF conclusion comes from a one 20-year-old study and one 16-year-old study.
- 2. The revised report incorrectly states on page C-28 "...that there has not been a tremendous amount of research in the area of aircraft noise effects on children."
- The AF conclusion is in direct contradiction to the findings of hundreds of meta-analyses, peer-reviewed studies, as cited in the 2011 World Health Organization Report, "Burden of Disease from Environmental Noise." Below are only a few citations from the 2011 WHO report.

The 2011 WHO report was written primarily for "policy-makers, their technical advisers and staff from supporting agencies, and other stakeholders who need to estimate the effects of environmental noise. It brings together evidence-based information on health effects of environmental noise and provides exemplary guidance on how to quantify these effects." (p. xiii). The WHO report concludes

- "considerable work has been done on assessing the exposure of populations to noise sources such as air traffic and road traffic." (p. 3)
- "There is sufficient evidence from large-scale epidemiological studies linking the population's exposure to environmental noise with adverse health effects. Therefore, environmental noise should be considered not only as a cause of nuisance but also a concern for public health and environmental health." (p. xvii)
- "There is overwhelming evidence that exposure to environmental noise has adverse effects on the health of the population. Recognizing the special need to protect children from the harmful effects of noise, the Parma Declaration adopted at the Fifth Ministerial Conference on Environment and Health called on all stakeholders to work together to reduce the exposure of children to noise...." (p. 105)
- "The evidence, in general, of a positive association (of noise with cardiovascular effects on adults and children, and blood pressure, hypertension and ischaemic heart diseases in children) has increased during recent years." (p.16)
- For noise levels greater than 60 dB (A), the myocardial infarction risk increases." (p. 20)
- Provide current health studies which address the health consequences to adults and children living in the noise zone
- 3. There was no crash data for FY 13 for the F-22 (page BR4-49/50)
 - Since safety estimates of the F-35A are based on the F-22, provide updated F-22 crash data.
 - Provide assessments of the likely number of crashes the F-35A will experience based on the flight hours the aircraft will have when they arrive at Burlington Air Guard Station (AGS).

 Provide information on how many flight hours each individual aircraft will have when it arrives at Burlington AGS. 4. There is no decibel level for the F-35A using afterburners (page BR4-21). In chart BR3.2.1, the decibel levels for the F-35 in afterburner assisted take-off and military power take-off at 1,000 ft are identical. Provide the decibel level for the F-35A in afterburner take-off. Can we be guaranteed that the F-35A will not exceed the stated percentage of time (5%) taking off in afterburner? Other Comments on the Revised Draft EIS On page 1-8 it states that prior to scoping meetings, the AF initiated direct contact with elected officials. Would you please provide more detail on these_ meetings? Provide the scoring information for the other two Air Guard bases under consideration for basing: McEntire and Jacksonville. Provide information on whether any Vermont Air Guard members will lose jobs, in particular, maintainer jobs, if the F-35A is based at Burlington AGS. • Provide information on the expected lifespan on the F-16s at VTANG. The mitigation proposals (maintaining the same quiet hours, arrival and departure times, and single take-offs as the F-16) have resulted in the loss of approximately 200 affordable homes in South Burlington (p. 2-48, BR4-17). Are there any other mitigation measures that can be taken which reduce the level and frequency of noise? The statements on pages BR4-17/18 indicate that the AF has no responsibility and will play no role in remediation. The AF has financially assisted local areas in other locations. Will the AF consider financially assisting the locally affected municipalities? Below are additional errors and omissions found in the revised draft EIS: 1. On page ES-7 it states that the "majority of written comments (over 900) were from citizens in Vermont and Maine who were not supportive of the basing action at Burlington International Airport. "Yet on page 1-9, it states that of the 913 comments received, 80% were in support of basing. In fact, only 35% of the comments were in support of the basing. 65% were opposed to the basing.

- Recommend comments be sub-divided by geographic location;
 specifically listing the views of those living within the 65 dB DNL and those living outside the 65 dB DNL.
- 2. The comparison chart, titled "Figure 13-1. Simplified Comparison of Environmental Consequences of Beddown Alternatives and Scenarios" that appeared on page ES-62 of the 2012 draft was omitted from the 2013 version.
- 3. The number of households and people in the noise zone is understated. _

Households

- a. Data from the 2010 U.S. census shows that for scenario 1, there are 11% more households in the noise zone than what is stated in the RDEIS (3,290 vs. 2,963), and 13% more households for scenario 2 (3,864 vs. 3,410).
- b. Grand list and e911 data shows that for scenario 1, there are 23% more households in the noise zone than what is stated in the RDEIS (3,669 vs. 2,963), and 23% more households for scenario 2 (4,200 vs. 3,410).

People

- c. Census data shows that for scenario 1, there are 9% more people in the noise zone than what is stated in the RDEIS (7,280 vs. 6.663), and 11% more people for scenario 2 (8,592 vs. 7,719).
- d. There is no information on the number of children living, or going to school within the 65 dB DNL. Provide this crucial information.
- 4. According to U.S. Census Data, the percentage of population growth in South Burlington from 2000-2010 was 20.3% (14,879-17,904). The RDEIS reports (on page BR4-77) only a 13% increase. The AF is looking at the incorrect census data from 2000. The 15,814 number was found to be in error due to over-counting of some students; and a corrected version was produced. Please use the corrected 2000 census report.
- 5. The number of children living in Vermont is incorrect. On page BR4-80, 12,592 children are listed as living in the entire state. In the 2012 draft EIS on page BR4-75, 147,523 children were listed as living in Vermont.
- 6. The AF did not include the Community College of Vermont (CCV) in Winooski as being in the noise zone. Under scenario 1, CCV would be in the 65 dB DNL zone. In scenario 2, CCV will be in the 70 dB DNL zone.

- 7. The AF underestimated the number of noise events that will be heard at academic institutions, by overlooking the fact that colleges have late afternoon and evening classes.
- 8. The AF omitted all references to the official comments sent from the South Burlington City offices: the City Council, the Planning Commission, and the School Board. The official letters from each of these three bodies were reproduced among the comments, but the names of these city bodies were not included in the alphabetical listing of comments. Rather the individual names of the Councilors, Commissioners, and Board members appeared as if it came from private citizens. Entries were included in the alphabetical listing for the City of Burlington and the City of Winooski, but there were no entries for the South Burlington city organizations.

Last year the South Burlington City Council sent in a 17-page letter with questions, concerns, and comments. Some of those questions, concerns, and comments were not answered or addressed in the May 2013 report. Below is a listing of the unanswered questions and unaddressed comments.

Unanswered Questions

- What recourse the area has to challenge continued basing
- · How many residential areas will be subject to 80dB DNL or higher
- Whether an analysis of the possible additional pollutants was conducted
- When another assessment of air quality will be conducted after basing
- The current safety status of the F-22, and the related safety assessment of the F-35A
- The risk to people living and working in the crash zones
- When and where the fuel will be dumped
- The effect of 18,000 pounds of fuel on the area's drinking water supply
- Whether the AF has informed the FAA of their erroneous noise data
- What recourse the community has if the projected noise and safety assessments prove to be worse than stated
- What factors so outweighed the costs to the population to have Burlington become the preferred alternative

Unaddressed Concerns

- Health effects on our children
- Loss of home values for local residents

- Loss of property taxes as a result of home value diminishing
- Effect on tourism
- Noise effects on the health of residents, including cardiovascular problems, birth weight, mortality rates, and physiological stress reaction
- Effects of 2,635 acres of local land being exposed to DNL above 65dB. "A DNL of 55 dB is a level "requisite to protect public health and welfare with an adequate margin of safety." (2012 DEIS page C-14)
- Noise effects on the learning and cognitive abilities, and the physiological impacts to the children attending Chamberlin Elementary School where the noise will be 68/70 dB DNL.
- The significance of 20 of the 22 representative locations near the airport being at or above the 65 dB DNL
- Whether mission profiles, training, and maintenance changes would result in different flight times and patterns
- How competing requirements for fresh water, power and other natural resources would be handled
- The strategies for dealing with drought conditions and a scarcity of fossil ____
 fuels

NOTE: It was only after compiling all of this information that we learned the paper and CD copies of the RDEIS were missing about 100 pages. And the missing pages were the ones that tracked the AF's response to comments. By the time, we received the missing pages, we had already expended a considerable amount of time looking for the AF responses within the text, and were not able to spend more hours relooking for this information once the missing pages were provided. Therefore, we will let our list of unanswered questions and unaddressed concerns remain, knowing that there is the possibility that the AF did respond to some of those questions and concerns.

Sincerely,

Rosanne Greco South Burlington City Councilor

Helen Riehle South Burlington City Councilor

Sandra Dooley Former South Burlington City Councilor

Paul Engels Former South Burlington City Councilor

ZBITNOFF - ITEM Z

Endangered Health: F-35 Basing at Burlington International Airport Endangers Public Health

Preface

Why another F-35 health report? The Burlington Board of Health has held hearings on the F-35 and has sent a resolution to the City Council identifying the F-35 at Burlington International Airport as a potential public health hazard. The Vermont Department of Health has produced a preliminary health assessment of the F-35. The Air Force has addressed the health issue. Nonetheless, another report is needed, because vital information crucial to the basing decision was omitted from previous reports. As a result, the public discussion of the health impact has been uninformed. We believe that once the scientific facts are fully known, the human and economic costs of basing a supersonic, tactical military jet in the midst of a residential community will be understood to far outweighing any potential benefit. The health impact on many thousands of people, which we conclusively demonstrate in this report, is a large and as yet unaccounted part of the cost.

What then is new in this report? First we have identified a *scientific consensus of leading experts*, representing the highest obtainable level of certainty, confirming negative healtheffects at the noise level imposed by the F-35. The scientific consensus stands in stark opposition to the misguided position of Vermont's political, business, and military leaders in support of the F-35. The scientific consensus has not previously been acknowledged in the official documents, in the media, or in the public debate surrounding the basing decision, and was in fact explicitly denied by the Vermont Department of Health in its Public Health Review.

Second, we demonstrate that the health impact on children is especially severe. This fact has been overlooked in previous reports and explicitly denied by the Air Force.

Third, based on the scientific consensus, the report for the first time conclusively demonstrates that the Air Force, in the Draft Environmental Impact Statement, grossly underestimates the health impact of the F-35.

What we demonstrate is that the F-35 is a threat to public health—not as a matter of opinion, not based on one study or another, but as a firmly established scientific conclusion.

The question then is do we accept the settled conclusion of science, or in the manner of global warming deniers, do we reject science in favor of subjective opinion. If we accept science then one of the enormous costs--the health risks that will be imposed on many thousands of children and adults for two generations--must weigh very heavily on the basing decision. A responsible assessment of these risks leads inescapably to a rejection of the F-35 in Burlington.

Find a copy of the full report "Endangered Health" at the following websites: Stop the F-35 Coalition:

http://www.stopthet35.com/sites/default/files/F-35%20Health%20Report.pdf Save Our Skies VT:

http://saveourskiesvt.org/endangered-health/

Burlington Air Guard Station F-35A Basing Issues

(May 2013)

I. NEGATIVE IMPACTS of the Basing at BTV

A. BASIC FACTS - 2012 Draft Environment Impact Statement (DEIS) Impacts to Burlington

- 1. DEIS states that taking no action (that is, not basing the F-35A) "would be the environmentally preferable alternative" (Page 2-29).
- DEIS states there is a negative impact to the Burlington area in the following categories: noise, air quality, land use, socioeconomics, environmental justice/protection of children, community facilities and public services, ground traffic and transportation, climate change, cumulative effects, and irreversible commitment of resources.
- 3. Under both scenarios, noise levels (65 dB DNL or greater) would increase. The following additional areas (based on 2000 census data) would be subject to these noise levels:
 - a. 672 additional acres would be added for a total of 2,635 acres.
 - b. Residential acreage would increase from 103 to 667 acres.
 - c. 2,863 more people would be affected for a total of 6,675 people –{using 2010 census it would be over 7,700 people}.
 - d. 1,366 more households would be affected for a total of 2,944 households {using 2010 census it would be over 3,400 households} (Pages ES-10, BR4-61, ES-11).
 - e. "Areas exposed to DNL above 65 dB are generally not considered suitable for residential use" (Page C-14).
- 4. "The F-35A is a new type of aircraft; historical trends show that mishaps rates of all types decrease the longer an aircraft is operational and as flight crews and maintenance personnel learn more about the aircraft's capabilities and limitations...." (Page ES-12)
 - a. "...there have not been enough flight hours to accurately depict the specific safety record for this new aircraft" (Page 3-29).
- 5. "The total population (referring to minority and low-income people) affected by noise levels equal to or greater than 65 dB DNL would increase by 48 percent." "When a comparison is made, the increases would be considered to affect these populations (minority and low-income people) disproportionately...." (Page BR4-77)
- Of all other bases under consideration in the DEIS, only Burlington has an increase in residential land use impacts (Page ES-70).

B. ECONOMIC IMPACTS to the Residents in the Noise Areas

- "Areas exposed to DNL above 65 dB are generally not considered suitable for residential use" (DEIS page C-14).
- 2. HUD, FAA, and VA recommend written disclosures to all prospective buyers or lessees of property within this noise area (DEIS page C-47).

- 3. Properties in noise areas over 65 dB DNL may not be eligible for federally guaranteed loans, program assistance, subsidy, or insurance (DEIS page C-46).
- 4. One study showed a 1.8 to 2.3% decrease in property values per dB increase of cumulative noise exposure (DEIS p. C-47).
- 5. Another study showed decreases in property values usually range from 0.5 to 2% per dB increase of cumulative noise exposure (DEIS page C-47).
- 6. In South Burlington, 180 dwelling units were identified in the 65 and higher dB DNL noise zones (2008 FAA report, p. 29).
 - a. The FAA Part 150 Update, dated April 2008, states "...the Air National Guard is one of the dominant noise contributors to the DNL contours, as documented in the August 2006 NEM Update..." (FAA, p. 21)
 - b. "Land acquisition and relocation is the only alternative that would eliminate the residential incompatibility" (FAA, p. 29).
 - c. "...noise barriers provide little, if any reductions, of noise from aircraft that are airborne and can be seen over the barrier" (FAA, p. 35).
- 7. To date, 55 affordable homes in South Burlington have been demolished. Another 81 are slated for demolition in 2013 because of aircraft (primarily military) noise.

II. SCORING SHEET Problems

A. PURPOSE of the Scoring Sheet

- The Air Force devised a scoring methodology to explain how bases were chosen. This was done to preclude future disputes and lawsuits such as the one filed against the F-35 basing at Eglin AFB, in Florida. It was intended to bring more transparency to the process.
- 2. The scoring sheet rated the bases in four areas: Mission, Capacity, Cost, and Environment.
 - a. Mission related principally to whether the airspace around the facility could accommodate the flying sorties of the F35A, and how the weather impacted visibility.
 - b. Capacity related to whether the existing facilities (hangers, maintenance units, simulator bays, munitions, runways, etc.) would be able to accommodate the F-35A.
 - c. Cost related to the cost of living of the area.
 - Environment related to existing air quality, and existing encroachment (meaning "incompatible development").

B. PROCESS Problem

- Unlike the other criteria, which evaluated whether the airspace and facilities could accommodate the future F-35A, the encroachment area (under environment) was related to the current aircraft—the F16.
- 2. Rather than ask if there would be incompatible development in the accident and noise zones around the airport for the F-35A, they asked if there was incompatible development currently for the F-16.
 - a. Since there are different accident and noise zones for the F-16 and the F-35A, it is not logical to assume that the presence or absence of buildings, or the numbers of buildings, for the current F-16 would be the same for the F-35A.

C. DATA Problem

- 1. Two questions in the 'Encroachment' area under the 'Environmental' category were answered incorrectly. Those questions were:
 - a. "Is there incompatible development in clear zones and/or accident potential area?" and
 - b. "Is there incompatible development in noise contours above 65 dB DNL?"
- 2. The answer marked for both questions was 'No' meaning that there were NO incompatible buildings in either area (accident and noise). Burlington thus received 3 points for each question (6 total).
- 3. But, there is incompatible development in both areas (accident and noise), meaning Burlington should not have received 6 points.
- 4. Burlington Air Guard Station received a total score of 91.021.
- 5. Without seeing the scores of the other Air Guard Stations, especially Jacksonville Air Guard Station in Florida, McEntire Joint National Guard Base in South Carolina, and Dannelly Field, in Alabama, it cannot be confirmed whether or not another Guard base scored higher than Burlington.
 - a. South Burlington City Council requested this from the Vermont Congressional Delegates in July 2012, and was told that the Air Force would not release it to them.
 - The Air Force denied two Freedom of Information Act (FOIA) requests to get the scoring sheets for other bases.

III. <u>FALLACIOUS Economic Arguments</u> by those who support basing the F-35A at the VTANG

A. Economic Argument #1: It will benefit the area economically.

- 1. DEIS states there is NO economic gain under scenario 1.
 - a. There would be no increase in jobs (DEIS page BR4-72).
- 2. DEIS states there would be only "minor" economic effect from the 266 additional military persons (83 full-time and 183 part-time) that would be added under scenario 2 (page BR4-73).
 - a. The full-time military will be transferred here from other places around the U.S. (Page BR4-74). It is highly unlikely that any of them would be Vermonters.
- 3. MG Dubie said that the Air Guard would LOSE maintainer jobs if the F-35A were to be based here, but did not say how many jobs would be lost (public hearing, April 19, 2010).
 - a. F-35A will not be maintained at the Burlington Air Guard Station, as the F-16 is. The F-35A will be maintained at a centralized location.
 - b. At least half of the full time VT Air Guard jobs are maintainer jobs.

B. Economic Argument #2: If it does not come here, the Guard Station will close.

- 1. No public official (military, government, or politician) has EVER said the base will close if the F-35A is not based here. (Lots of lay-folks have falsely said or implied the base will close.)
- 2. The F-35 does not affect the VT Army Guard (4,000 Army Guard members) which is the majority of the VT National Guard.
- The VT Air Guard is authorized 1,130 members: 730 part time military, and 400 full time military and civilians members. NOTE: The VT Guard will not disclose how many Air Guard members are Vermonters. Guard members often come from other states to serve their monthly weekend Guard duty.
- MG Dubie said in a press conference in July 2012, that if the F-35A does not come here, the base MAY get SMALLER (likely meaning the Air Guard).
- 5. There are other options/missions for the Air Guard.
 - Other ANG bases have switched missions (e.g., to drones/other unmanned vehicles; anti-terrorism; cyber security missions, etc.)
 - Burlington was being considered (along with other Guard bases) for basing the new tanker aircraft: KC-46A
 - c. It appears that the VT Air Guard seems to be focused exclusively on fighter aircraft, and seems reluctant to consider non-fighter aircraft missions.
- 6. Comparison to the closing of the former Plattsburg AFB is absurd.
 - a. Plattsburgh was an active duty base with over 5,000 full-time active duty personnel, in an area (Plattsburg) with a population of around 20,000.
 - b. The Burlington Air Guard Station has 400 full-time personnel, in an area with a population (Burlington and South Burlington) of around 60,000.
 - c. The economy of Plattsburgh recovered in half of the time expected (12 years versus the estimated 25 years).
- Even were the Air Guard Station to close, it's doubtful that it would have a significant economic impact on our area.
 - a. It is unclear (because the VTANG will not disclose the information) how much of the reported \$53 million in salaries are paid to Vermonters.
 - b. Our area added 4.250 new jobs over the past three years (1,400 new jobs per year).
- However a major new development is that the Air Force is extending the lifespan of all F-16's until at least 2030.
- Two possible outcomes are:
 - a. The Air Guard Station closes entirely 20 years from now, and 400 Air Guard members lose their full-time jobs, and 730 Air Guard members lose their part-time jobs.
 - b. The F-35As arrive here five years from now, and over 7,700 local residents lose their quality of life, suffer a decrease in home values, and are trapped in houses that the federal government labels unsuitable for residential use.

IV. <u>FALLACIOUS National Security/VT Air Guard Support/Patriotism</u> Arguments by those who support basing the F-35A at the VTANG

A. National Security

- Military experts, politicians, and academics agree that the current major threats to the U.S. are terrorism and cyber-warfare.
 - a. Fighter-bombers have no role in countering these threats in the U.S.
- 2. The only threat from military aircraft comes from Russia and China.
 - Vermont is a poor location to respond to these threats.
- 3. The F-35A can and might carry nuclear weapons.
 - a. This makes an F-35 base a huge target for terrorists/other enemies.
 - AF has had recent problems with nuclear weapons security.

B. Vermont Air Guard Support

- Supporting the Guard means looking long-term. Actively recruiting and accepting new missions which counter current and future threats to our democracy is the best way to ensure a stable future for the VT Air Guard.
- Supporting the Guard means providing all the services our Guard families need when their Guard member is deployed, and most importantly all the services the guardsmen and guardswomen and their families need when they return to Vermont from war zones.

C. Patriotism

- Patriotism does not mean blindly accepting whatever weapon systems defense contractors propose and politicians support.
- Patriotism does not mean bankrupting our country so huge defense contractors can stay in business.
- Patriotism does not mean that defense contractor executives and shareholders should be the ones who profit most from astronomically expensive weapon systems.
- 4. Patriotism means supporting what is best for our citizens, including a good job for all who can work, a health system that cares for all regardless of economic status, education that allows all individuals to reach their potential, and safe housing for everyone.
- 5. Patriotism means supporting our troops and ensuring that they and their families are taken care of financially and medically. Yet our government is planning to pay for costly and questionable weapon systems, such as the F-35, by freezing military salaries; cutting our troops' benefits; slashing their families' benefits; increasing veterans' health care costs; and cutting programs for homeless, disabled, and unemployed veterans.

V. Six-minute noise myth

A. THE MYTH: The F-35A will cause noise for only six minutes a day, four days a week, and this is a minor inconvenience.

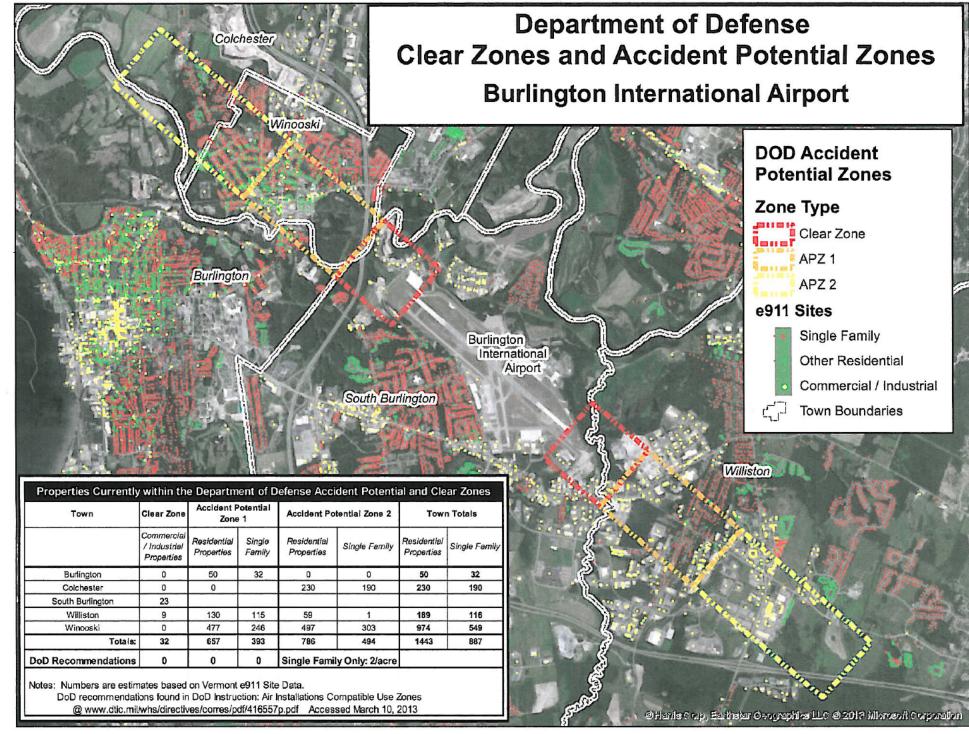
- 1. The DEIS spends 54 pages, and cites 85 studies explaining noise, noise modeling, noise metrics, and noise effects (pages C1-54). The noise metrics include:
 - maximum sound level (Lmax)
 - peak sound level

- equivalent sound level (Leq)
- sound exposure level (SEL)
- day-night average sound level (DNL)
- onset-rate-adjusted monthly day-night average sound level (Ldnmr)
- number-of-events above a threshold level (NA)
- time above a specified level (TA)
- 2. The DEIS analyzes noise effects on the following:
 - · non-auditory health
 - annovance
 - speech interference
 - sleep disturbance
 - · hearing impairment
 - performance
 - · learning and cognitive abilities
 - children
 - · domestic animals and wildlife
 - property values
 - structures
 - terrain
 - cultural resources
- 3. The DEIS says "F-35A flight operations would total 7,296 annually, with all occurring during environmental daytime hours (between 7:00 a.m. and 10:00 p.m.)" (BR4-30); The Air Force expects the F-35As will fly 260 days per year (BR4-4); And F-35A take-off noise will be 118 SEL (dBA) (BR4-18).
- 4. Ads claim that the F-16s produce noise for only 6 minutes a day. They count only the take-off noise, and ignore arrival noise and overhead pattern noise. Ads claim the F-35 will perform in the same manner. The ads are wrong. The F-35As will perform events overhead, as well as land. (BR4-30) The six minutes claimed in the ads represents <u>less than half of the actual total noise heard</u>.
- 5. Using Air Force projections of 7,296 F-35A operations over 260 days per year, residents will experience unsafe noise levels one-to-two times per waking hour.
- The National Institute for Occupational Safety and Health (NIOSH) reports that the safe time for 118 dB
 (assessed F-35A noise on take-off) is 14 seconds. Even just six minutes is more than 12 times the safe
 standard.
- 7. Damage from noise is cumulative. Six minutes a day, four days a week, 260 days per year, for 35 years equates to 54,600 minutes for each of the 7,700+ residents living in the noise area.

B. THE TRUTH:

Any claim that draws conclusions from a single incident of noise ignores science and numerous scientific and health studies that show that noise effect is cumulative. Even just six minutes of tremendous noise, repeated over time, has significant health consequences. Recent scientific analysis clearly shows that extended exposure, even at small intervals, to excessive noise causes irreparable health damage.

Only six minutes of moderate noise is not concerning. 54,600 minutes of noise that is <u>at least 12 times</u> above the safety level is.



Patricia Caouette

12 July 2013

Nicholas Germanos, HQ ACC/A7PS 129 Andrews St., Suite 332 Langley AFB, VA 23665-2769

Dear Mr. Germanos,

I live in Winooski, Vermont, in the zone designated by the Department of Defense as ACCIDENT POTENTIAL ZONE 1. I have circled my location on the enclosed DOD map of clear and accident potential zones.

Winooski has approximately seven thousand residents, and more than half of us live in APZ1 and APZ 2. Bringing the F-35, with its expected crash rate much higher than that of the F-16 or that of commercial aircraft shows total disregard for my town and its people. Bring the F-35 to Burlington will put our homes in the zone designated by the FAA as "UNSUITABLE FOR RESIDENTIAL USE." Winooski and its citizens are not expendable! We are not to be considered merely collateral damage!

I cannot imagine any reasonable scenario that would lead the Air Force to put these planes in the population center of any state when you have other, sparsely populated areas under consideration.

I am also very concerned about the health effects of the noise to which we will be subjected. The dangers to our health are not trivial, nor are they merely an inconvenience. Indeed, hearing loss is only one of many, that include high blood pressure and cognitive impairment. The negative health effects are of course magnified in infants and children.

Our Winooski City Council has passed a resolution that takes a stand against basing the F-35 at the Burlington Airport. I and many of my fellow citizens had urged them to do so.

I am enclosing 4 items in support of my opposition to the basing of the F35 in Burlington.

1: A letter to you dated July 7. 2013, from former and current members of the South Burlington City Council.

- 2. A leaflet that is a reminder that the current EIS lacks information of recent research on health risks of local basing of the F-35.
- 3. A leaflet entitled "Burlington Air Guard Station F-35A Basing Issues." Parts 1 A and 1 B make particular reference to the Environmental Impact Statement.
- 4. A Department of Defense Clear Zones and Accident Potential Zones for Burlington International Airport map, on which I have circled my home. As I stated above, I am extremely distressed about being in the Crash Zone.

I hope you will give my comments your serious consideration. Basing the F-35 in the Burlington area would be devastating for me and thousands of others who live in the 65 DNL zones and the Crash Zones. I, along with many others will engage in court action , if that is what it takes to prevent basing the F-35 in the Burlington area.

Sincerely,

Patricia Caouette

Jahicia Coutte

7 July 2013

Mr. Nicholas Germanos, HQ ACC/A7PS 129 Andrews St., Suite 332 Langley AFB, VA 23665-2769

Dear Mr. Germanos,

Thank you for the opportunity to comment on the United States Air Force F-35A Operational Basing Environmental Impact Statement dated May 2013, regarding basing the F-35A at the Burlington Air Guard Station.

After reading the revised report, it is clear that this draft also contains substantive errors, similar or greater in magnitude than the errors in the March 2012 report, which caused the AF to re-write sections of the draft EIS. Additionally, there are new errors and omission in the revised report. The errors found relate to the analysis, methodologies and/or information, which is factually inaccurate, analytically inadequate, and that question scientific and technical conclusions.

The most egregious substantive error relates to the noise effects on the health of people, in particular, children. Just as the 2012 draft EIS used 12-year old census data and thus underestimated the impact on the population by over a thousand people, this revised draft uses a 20-year old and a 16-year old study regarding the negative health effects of noise. Well over a hundred more recent studies show negative health effects from noise, in particular, aircraft noise. And there is overwhelming evidence from over 20 studies that noise impairs the cognitive development of children. More time needs to be devoted to reviewing these studies. NOTE: the revised report spends 19 ½ pages discussing the noise effects on animals; and spends only 2 ¾ pages discussing the noise effects on children.

- The revised report incorrectly states on pages C-27 and NS-30, "In summary, there is no scientific basis for a claim that potential health effects exist for aircraft time average sound levels below 75 dB." According to the revised report, the AF conclusion comes from a one 20-year-old study and one 16year-old study.
- 2. The revised report incorrectly states on page C-28 "...that there has not been a tremendous amount of research in the area of aircraft noise effects on children."
- The AF conclusion is in direct contradiction to the findings of hundreds of meta-analyses, peer-reviewed studies, as cited in the 2011 World Health Organization Report, "Burden of Disease from Environmental Noise." Below are only a few citations from the 2011 WHO report.

- The 2011 WHO report was written primarily for "policy-makers, their technical advisers and staff from supporting agencies, and other stakeholders who need to estimate the effects of environmental noise. It brings together evidence-based information on health effects of environmental noise and provides exemplary guidance on how to quantify these effects." (p. xiii). The WHO report concludes
- "considerable work has been done on assessing the exposure of populations to noise sources such as air traffic and road traffic." (p. 3)
- "There is sufficient evidence from large-scale epidemiological studies linking the population's exposure to environmental noise with adverse health effects. Therefore, environmental noise should be considered not only as a cause of nuisance but also a concern for public health and environmental health." (p. xvii)
- "There is overwhelming evidence that exposure to environmental noise has adverse effects on the health of the population. Recognizing the special need to protect children from the harmful effects of noise, the Parma Declaration adopted at the Fifth Ministerial Conference on Environment and Health called on all stakeholders to work together to reduce the exposure of children to noise...." (p. 105)
- "The evidence, in general, of a positive association (of noise with cardiovascular effects on adults and children, and blood pressure, hypertension and ischaemic heart diseases in children) has increased during recent years." (p.16)
- For noise levels greater than 60 dB (A), the myocardial infarction risk increases." (p. 20)
- Provide current health studies which address the health consequences to adults and children living in the noise zone
- 3. There was no crash data for FY 13 for the F-22 (page BR4-49/50)
 - Since safety estimates of the F-35A are based on the F-22, provide updated F-22 crash data.
 - Provide assessments of the likely number of crashes the F-35A will
 experience based on the flight hours the aircraft will have when they
 arrive at Burlington Air Guard Station (AGS).

 Provide information on how many flight hours each individual aircraft will have when it arrives at Burlington AGS.
4. There is no decibel level for the F-35A using afterburners (page BR4-21).
 In chart BR3.2.1, the decibel levels for the F-35 in afterburner assisted take-off and military power take-off at 1,000 ft are identical. Provide the decibel level for the F-35A in afterburner take-off. Can we be guaranteed that the F-35A will not exceed the stated percentage of time (5%) taking off in afterburner?
Other Comments on the Revised Draft EIS
 On page 1-8 it states that prior to scoping meetings, the AF initiated direct contact with elected officials. Would you please provide more detail on these meetings? Provide the scoring information for the other two Air Guard bases under consideration for basing: McEntire and Jacksonville. Provide information on whether any Vermont Air Guard members will lose jobs, in particular, maintainer jobs, if the F-35A is based at Burlington AGS. Provide information on the expected lifespan on the F-16s at VTANG. The mitigation proposals (maintaining the same quiet hours, arrival and departure times, and single take-offs as the F-16) have resulted in the loss of approximately 200 affordable homes in South Burlington (p. 2-48, BR4-17). Are there any other mitigation measures that can be taken which reduce the level and frequency of noise?
The statements on pages BR4-17/18 indicate that the AF has no responsibility and will play no role in remediation. The AF has financially assisted local areas in other locations. Will the AF consider financially assisting the locally affected municipalities?
Below are additional errors and omissions found in the revised draft EIS:
1. On page ES-7 it states that the "majority of written comments (over 900) were from citizens in Vermont and Maine who were not supportive of the basing action at Burlington International Airport." Yet on page 1-9, it states that of the 913 comments received, 80% were in support of basing. In fact, only 35% of the comments were in support of the basing. 65% were opposed to the basing.

- Recommend comments be sub-divided by geographic location; specifically listing the views of those living within the 65 dB DNL and those living outside the 65 dB DNL.
- The comparison chart, titled "Figure 13-1. Simplified Comparison of Environmental Consequences of Beddown Alternatives and Scenarios" that appeared on page ES-62 of the 2012 draft was omitted from the 2013 version.
- 3. The number of households and people in the noise zone is understated.

Households

- a. Data from the 2010 U.S. census shows that for scenario 1, there are 11% more households in the noise zone than what is stated in the RDEIS (3,290 vs. 2,963), and 13% more households for scenario 2 (3,864 vs. 3,410).
- b. Grand list and e911 data shows that for scenario 1, there are 23% more households in the noise zone than what is stated in the RDEIS (3,669 vs. 2,963), and 23% more households for scenario 2 (4,200 vs. 3,410).

<u>People</u>

- c. Census data shows that for scenario 1, there are 9% more people in the noise zone than what is stated in the RDEIS (7,280 vs. 6.663), and 11% more people for scenario 2 (8,592 vs. 7,719).
- d. There is no information on the number of children living, or going to school within the 65 dB DNL. Provide this crucial information.
- 4. According to U.S. Census Data, the percentage of population growth in South Burlington from 2000-2010 was 20.3% (14,879-17,904). The RDEIS reports (on page BR4-77) only a 13% increase. The AF is looking at the incorrect census data from 2000. The 15,814 number was found to be in error due to over-counting of some students; and a corrected version was produced. Please use the corrected 2000 census report.
- 5. The number of children living in Vermont is incorrect. On page BR4-80, 12,592 children are listed as living in the entire state. In the 2012 draft EIS on page BR4-75, 147,523 children were listed as living in Vermont.
- 6. The AF did not include the Community College of Vermont (CCV) in Winooski as being in the noise zone. Under scenario 1, CCV would be in the 65 dB DNL zone. In scenario 2, CCV will be in the 70 dB DNL zone.

CAOUETTE ATT 1

- 7. The AF underestimated the number of noise events that will be heard at academic institutions, by overlooking the fact that colleges have late afternoon and evening classes.
- 8. The AF omitted all references to the official comments sent from the South Burlington City offices: the City Council, the Planning Commission, and the School Board. The official letters from each of these three bodies were reproduced among the comments, but the names of these city bodies were not included in the alphabetical listing of comments. Rather the individual names of the Councilors, Commissioners, and Board members appeared as if it came from private citizens. Entries were included in the alphabetical listing for the City of Burlington and the City of Winooski, but there were no entries for the South Burlington city organizations.

Last year the South Burlington City Council sent in a 17-page letter with questions, concerns, and comments. Some of those questions, concerns, and comments were not answered or addressed in the May 2013 report. Below is a listing of the unanswered questions and unaddressed comments.

Unanswered Questions

- What recourse the area has to challenge continued basing
- How many residential areas will be subject to 80dB DNL or higher
- Whether an analysis of the possible additional pollutants was conducted
- When another assessment of air quality will be conducted after basing
- The current safety status of the F-22, and the related safety assessment of the F-35A
- The risk to people living and working in the crash zones
- When and where the fuel will be dumped
- The effect of 18,000 pounds of fuel on the area's drinking water supply
- Whether the AF has informed the FAA of their erroneous noise data
- What recourse the community has if the projected noise and safety assessments prove to be worse than stated
- What factors so outweighed the costs to the population to have Burlington become the preferred alternative

Unaddressed Concerns

- Health effects on our children
- Loss of home values for local residents

- Loss of property taxes as a result of home value diminishing
- Effect on tourism
- Noise effects on the health of residents, including cardiovascular problems, birth weight, mortality rates, and physiological stress reaction
- Effects of 2,635 acres of local land being exposed to DNL above 65dB. "A DNL of 55 dB is a level "requisite to protect public health and welfare with an adequate margin of safety." (2012 DEIS page C-14)
- Noise effects on the learning and cognitive abilities, and the physiological impacts to the children attending Chamberlin Elementary School where the noise will be 68/70 dB DNL.
- The significance of 20 of the 22 representative locations near the airport being at or above the 65 dB DNL
- Whether mission profiles, training, and maintenance changes would result in different flight times and patterns
- How competing requirements for fresh water, power and other natural resources would be handled
- The strategies for dealing with drought conditions and a scarcity of fossil fuels

NOTE: It was only after compiling all of this information that we learned the paper and CD copies of the RDEIS were missing about 100 pages. And the missing pages were the ones that tracked the AF's response to comments. By the time, we received the missing pages, we had already expended a considerable amount of time looking for the AF responses within the text, and were not able to spend more hours relooking for this information once the missing pages were provided. Therefore, we will let our list of unanswered questions and unaddressed concerns remain, knowing that there is the possibility that the AF did respond to some of those questions and concerns.

Sincerely.

Rosanne Greco South Burlington City Councilor

Helen Riehle South Burlington City Councilor

Sandra Dooley Former South Burlington City Councilor

Paul Engels Former South Burlington City Councilor

Endangered Health: F-35 Basing at Burlington International Airport Endangers Public Health

Preface

Why another F-35 health report? The Burlington Board of Health has held hearings on the F-35 and has sent a resolution to the City Council identifying the F-35 at Burlington International Airport as a potential public health hazard. The Vermont Department of Health has produced a preliminary health assessment of the F-35. The Air Force has addressed the health issue. Nonetheless, another report is needed, because vital information crucial to the basing decision was omitted from previous reports. As a result, the public discussion of the health impact has been uninformed. We believe that once the scientific facts are fully known, the human and economic costs of basing a supersonic, tactical military jet in the midst of a residential community will be understood to far outweighing any potential benefit. The health impact on many thousands of people, which we conclusively demonstrate in this report, is a large and as yet unaccounted part of the cost.

What then is new in this report? First we have identified a *scientific consensus of leading experts*, representing the highest obtainable level of certainty, confirming negative healtheffects at the noise level imposed by the F-35. The scientific consensus stands in stark opposition to the misguided position of Vermont's political, business, and military leaders in support of the F-35. The scientific consensus has not previously been acknowledged in the official documents, in the media, or in the public debate surrounding the basing decision, and was in fact explicitly denied by the Vermont Department of Health in its Public Health Review.

Second, we demonstrate that the health impact on children is especially severe. This fact has been overlooked in previous reports and explicitly denied by the Air Force.

Third, based on the scientific consensus, the report for the first time conclusively demonstrates that the Air Force, in the Draft Environmental Impact Statement, grossly underestimates the health impact of the F-35.

What we demonstrate is that the F-35 is a threat to public health—not as a matter of opinion, not based on one study or another, but as a firmly established scientific conclusion.

The question then is do we accept the settled conclusion of science, or in the manner of global warming deniers, do we reject science in favor of subjective opinion. If we accept science then one of the enormous costs--the health risks that will be imposed on many thousands of children and adults for two generations--must weigh very heavily on the basing decision. A responsible assessment of these risks leads inescapably to a rejection of the F-35 in Burlington.

Find a copy of the full report "Endangered Health" at the following websites: Stop the F-35 Coalition:

http://www.stopther35.com/sites/default/files/F-35%20Health%20Report.pdf Save Our Skies VT:

http://saveourskiesyt.org/endangered-health/

Burlington Air Guard Station F-35A Basing Issues

(May 2013)

I. NEGATIVE IMPACTS of the Basing at BTV

A. BASIC FACTS - 2012 Draft Environment Impact Statement (DEIS) Impacts to Burlington

- 1. DEIS states that taking no action (that is, not basing the F-35A) "would be the environmentally preferable alternative" (Page 2-29).
- DEIS states there is a negative impact to the Burlington area in the following categories: noise, air quality, land use, socioeconomics, environmental justice/protection of children, community facilities and public services, ground traffic and transportation, climate change, cumulative effects, and irreversible commitment of resources.
- 3. Under both scenarios, noise levels (65 dB DNL or greater) would increase. The following additional areas (based on 2000 census data) would be subject to these noise levels:
 - a. 672 additional acres would be added for a total of 2,635 acres.
 - b. Residential acreage would increase from 103 to 667 acres.
 - c. 2,863 more people would be affected for a total of 6,675 people –{using 2010 census it would be over 7,700 people}.
 - d. 1,366 more households would be affected for a total of 2,944 households {using 2010 census it would be over 3,400 households} (Pages ES-10, BR4-61, ES-11).
 - e. "Areas exposed to DNL above 65 dB are generally not considered suitable for residential use" (Page C-14).
- 4. "The F-35A is a new type of aircraft; historical trends show that mishaps rates of all types decrease the longer an aircraft is operational and as flight crews and maintenance personnel learn more about the aircraft's capabilities and limitations...." (Page ES-12)
 - a. "...there have not been enough flight hours to accurately depict the specific safety record for this new aircraft" (Page 3-29).
- 5. "The total population (referring to minority and low-income people) affected by noise levels equal to or greater than 65 dB DNL would increase by 48 percent." "When a comparison is made, the increases would be considered to affect these populations (minority and low-income people) disproportionately...." (Page BR4-77)
- Of all other bases under consideration in the DEIS, only Burlington has an increase in residential land use impacts (Page ES-70).

B. ECONOMIC IMPACTS to the Residents in the Noise Areas

- "Areas exposed to DNL above 65 dB are generally not considered suitable for residential use" (DEIS page C-14).
- 2. HUD, FAA, and VA recommend written disclosures to all prospective buyers or lessees of property within this noise area (DEIS page C-47).

- 3. Properties in noise areas over 65 dB DNL may not be eligible for federally guaranteed loans, program assistance, subsidy, or insurance (DEIS page C-46).
- 4. One study showed a 1.8 to 2.3% decrease in property values per dB increase of cumulative noise exposure (DEIS p. C-47).
- 5. Another study showed decreases in property values usually range from 0.5 to 2% per dB increase of cumulative noise exposure (DEIS page C-47).
- 6. In South Burlington, 180 dwelling units were identified in the 65 and higher dB DNL noise zones (2008 FAA report, p. 29).
 - a. The FAA Part 150 Update, dated April 2008, states "...the Air National Guard is one of the dominant noise contributors to the DNL contours, as documented in the August 2006 NEM Update..." (FAA, p. 21)
 - b. "Land acquisition and relocation is the only alternative that would eliminate the residential incompatibility" (FAA, p. 29).
 - c. "...noise barriers provide little, if any reductions, of noise from aircraft that are airborne and can be seen over the barrier" (FAA, p. 35).
- 7. To date, 55 affordable homes in South Burlington have been demolished. Another 81 are slated for demolition in 2013 because of aircraft (primarily military) noise.

II. SCORING SHEET Problems

A. PURPOSE of the Scoring Sheet

- The Air Force devised a scoring methodology to explain how bases were chosen. This was done to preclude future disputes and lawsuits such as the one filed against the F-35 basing at Eglin AFB, in Florida. It was intended to bring more transparency to the process.
- 2. The scoring sheet rated the bases in four areas: Mission, Capacity, Cost, and Environment.
 - Mission related principally to whether the airspace around the facility could accommodate the flying sorties of the F35A, and how the weather impacted visibility.
 - Capacity related to whether the existing facilities (hangers, maintenance units, simulator bays, munitions, runways, etc.) would be able to accommodate the F-35A.
 - c. Cost related to the cost of living of the area.
 - d. Environment related to existing air quality, and existing encroachment (meaning "incompatible development").

B. PROCESS Problem

- Unlike the other criteria, which evaluated whether the airspace and facilities could accommodate the future F-35A, the encroachment area (under environment) was related to the current aircraft—the F16.
- 2. Rather than ask if there would be incompatible development in the accident and noise zones around the airport for the F-35A, they asked if there was incompatible development currently for the F-16.
 - a. Since there are different accident and noise zones for the F-16 and the F-35A, it is not logical to assume that the presence or absence of buildings, or the numbers of buildings, for the current F-16 would be the same for the F-35A.

C. DATA Problem

- 1. Two questions in the 'Encroachment' area under the 'Environmental' category were answered incorrectly. Those questions were:
 - a. "Is there incompatible development in clear zones and/or accident potential area?" and
 - b. "Is there incompatible development in noise contours above 65 dB DNL?"
- 2. The answer marked for both questions was 'No' meaning that there were NO incompatible buildings in either area (accident and noise). Burlington thus received 3 points for each question (6 total).
- 3. But, there is incompatible development in both areas (accident and noise), meaning Burlington should not have received 6 points.
- 4. Burlington Air Guard Station received a total score of 91.021.
- 5. Without seeing the scores of the other Air Guard Stations, especially Jacksonville Air Guard Station in Florida, McEntire Joint National Guard Base in South Carolina, and Dannelly Field, in Alabama, it cannot be confirmed whether or not another Guard base scored higher than Burlington.
 - South Burlington City Council requested this from the Vermont Congressional Delegates in July 2012, and was told that the Air Force would not release it to them.
 - The Air Force denied two Freedom of Information Act (FOIA) requests to get the scoring sheets for other bases.

III. <u>FALLACIOUS Economic Arguments</u> by those who support basing the F-35A at the VTANG

A. Economic Argument #1: It will benefit the area economically.

- 1. DEIS states there is NO economic gain under scenario 1.
 - a. There would be no increase in jobs (DEIS page BR4-72).
- 2. DEIS states there would be only "minor" economic effect from the 266 additional military persons (83 full-time and 183 part-time) that would be added under scenario 2 (page BR4-73).
 - a. The full-time military will be transferred here from other places around the U.S. (Page BR4-74). It is highly unlikely that any of them would be Vermonters.
- MG Dubie said that the Air Guard would LOSE maintainer jobs if the F-35A were to be based here, but did
 not say how many jobs would be lost (public hearing, April 19, 2010).
 - F-35A will not be maintained at the Burlington Air Guard Station, as the F-16 is. The F-35A will be maintained at a centralized location.
 - b. At least half of the full time VT Air Guard jobs are maintainer jobs.

B. Economic Argument #2: If it does not come here, the Guard Station will close.

- 1. No public official (military, government, or politician) has EVER said the base will close if the F-35A is not based here. (Lots of lay-folks have falsely said or implied the base will close.)
- 2. The F-35 does not affect the VT Army Guard (4,000 Army Guard members) which is the majority of the VT National Guard.
- The VT Air Guard is authorized 1,130 members: 730 part time military, and 400 full time military and civilians members. NOTE: The VT Guard will not disclose how many Air Guard members are Vermonters. Guard members often come from other states to serve their monthly weekend Guard duty.
- 4. MG Dubie said in a press conference in July 2012, that if the F-35A does not come here, the base MAY get SMALLER (likely meaning the Air Guard).
- 5. There are other options/missions for the Air Guard.
 - Other ANG bases have switched missions (e.g., to drones/other unmanned vehicles; anti-terrorism; cyber security missions, etc.)
 - b. Burlington was being considered (along with other Guard bases) for basing the new tanker aircraft: KC-46A
 - c. It appears that the VT Air Guard seems to be focused exclusively on fighter aircraft, and seems reluctant to consider non-fighter aircraft missions.
- 6. Comparison to the closing of the former Plattsburg AFB is absurd.
 - Plattsburgh was an active duty base with over 5,000 full-time active duty personnel, in an area (Plattsburg) with a population of around 20,000.
 - b. The Burlington Air Guard Station has 400 full-time personnel, in an area with a population (Burlington and South Burlington) of around 60,000.
 - c. The economy of Plattsburgh recovered in half of the time expected (12 years versus the estimated 25 years).
- Even were the Air Guard Station to close, it's doubtful that it would have a significant economic impact on our area.
 - a. It is unclear (because the VTANG will not disclose the information) how much of the reported \$53 million in salaries are paid to Vermonters.
 - Our area added 4,250 new jobs over the past three years (1,400 new jobs per year).
- 8. However a major new development is that the Air Force is extending the lifespan of all F-16's until at least 2030.
- 9. Two possible outcomes are:
 - a. The Air Guard Station closes entirely 20 years from now, and 400 Air Guard members lose their full-time jobs, and 730 Air Guard members lose their part-time jobs.
 - b. The F-35As arrive here five years from now, and over 7,700 local residents lose their quality of life, suffer a decrease in home values, and are trapped in houses that the federal government labels unsuitable for residential use.



IV. <u>FALLACIOUS National Security/VT Air Guard Support/ Patriotism</u> Arguments by those who support basing the F-35A at the VTANG

A. National Security

- Military experts, politicians, and academics agree that the current major threats to the U.S. are terrorism and cyber-warfare.
 - a. Fighter-bombers have no role in countering these threats in the U.S.
- 2. The only threat from military aircraft comes from Russia and China.
 - a. Vermont is a poor location to respond to these threats.
- 3. The F-35A can and might carry nuclear weapons.
 - a. This makes an F-35 base a huge target for terrorists/other enemies.
 - b. AF has had recent problems with nuclear weapons security.

B. Vermont Air Guard Support

- Supporting the Guard means looking long-term. Actively recruiting and accepting new missions which counter current and future threats to our democracy is the best way to ensure a stable future for the VT Air Guard.
- Supporting the Guard means providing all the services our Guard families need when their Guard member is deployed, and most importantly all the services the guardsmen and guardswomen and their families need when they return to Vermont from war zones.

C. Patriotism

- Patriotism does not mean blindly accepting whatever weapon systems defense contractors propose and politicians support.
- 2. Patriotism does not mean bankrupting our country so huge defense contractors can stay in business.
- Patriotism does not mean that defense contractor executives and shareholders should be the ones who profit most from astronomically expensive weapon systems.
- 4. Patriotism means supporting what is best for our citizens, including a good job for all who can work, a health system that cares for all regardless of economic status, education that allows all individuals to reach their potential, and safe housing for everyone.
- 5. Patriotism means supporting our troops and ensuring that they and their families are taken care of financially and medically. Yet our government is planning to pay for costly and questionable weapon systems, such as the F-35, by freezing military salaries; cutting our troops' benefits; slashing their families' benefits; increasing veterans' health care costs; and cutting programs for homeless, disabled, and unemployed veterans.

V. Six-minute noise myth

A. THE MYTH: The F-35A will cause noise for only six minutes a day, four days a week, and this is a minor inconvenience.

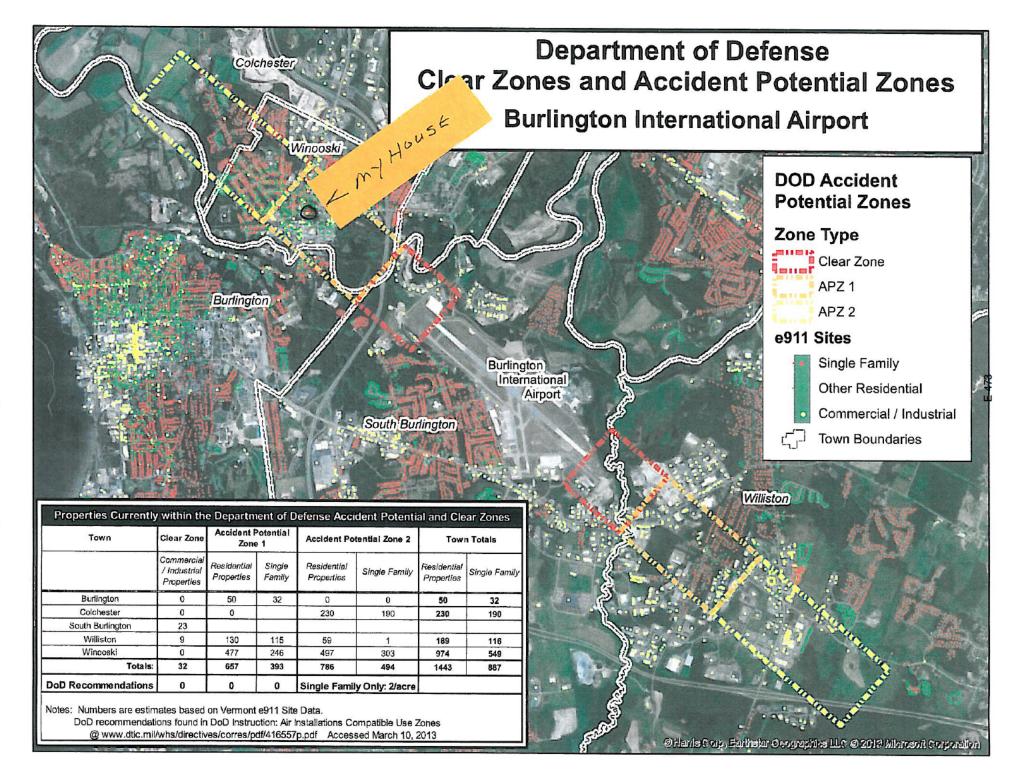
- 1. The DEIS spends 54 pages, and cites 85 studies explaining noise, noise modeling, noise metrics, and noise effects (pages C1-54). The noise metrics include:
 - maximum sound level (Lmax)
 - peak sound level

- equivalent sound level (Leq)
- sound exposure level (SEL)
- day-night average sound level (DNL)
- onset-rate-adjusted monthly day-night average sound level (Ldnmr)
- number-of-events above a threshold level (NA)
- time above a specified level (TA)
- 2. The DEIS analyzes noise effects on the following:
 - non-auditory health
 - annoyance
 - speech interference
 - sleep disturbance
 - hearing impairment
 - performance
 - learning and cognitive abilities
 - children
 - · domestic animals and wildlife
 - property values
 - structures
 - terrain
 - cultural resources
- 3. The DEIS says "F-35A flight operations would total 7,296 annually, with all occurring during environmental daytime hours (between 7:00 a.m. and 10:00 p.m.)" (BR4-30): The Air Force expects the F-35As will fly 260 days per year (BR4-4); And F-35A take-off noise will be 118 SEL (dBA) (BR4-18).
- 4. Ads claim that the F-16s produce noise for only 6 minutes a day. They count only the take-off noise, and ignore arrival noise and overhead pattern noise. Ads claim the F-35 will perform in the same manner. The ads are wrong. The F-35As will perform events overhead, as well as land. (BR4-30) The six minutes claimed in the ads represents <u>less than half of the actual total noise heard</u>.
- 5. Using Air Force projections of 7,296 F-35A operations over 260 days per year, residents will experience unsafe noise levels one-to-two times per waking hour.
- The National Institute for Occupational Safety and Health (NIOSH) reports that the safe time for 118 dB
 (assessed F-35A noise on take-off) is 14 seconds. Even just six minutes is more than 12 times the safe
 standard.
- 7. Damage from noise is cumulative. Six minutes a day, four days a week, 260 days per year, for 35 years equates to 54,600 minutes for each of the 7,700+ residents living in the noise area.

B. THE TRUTH:

Any claim that draws conclusions from a single incident of noise ignores science and numerous scientific and health studies that show that noise effect is cumulative. Even just six minutes of tremendous noise, repeated over time, has significant health consequences. Recent scientific analysis clearly shows that extended exposure, even at small intervals, to excessive noise causes irreparable health damage.

Only six minutes of moderate noise is not concerning. 54,600 minutes of noise that is <u>at least 12 times</u> above the safety level is.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUL 1 5 2013

OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE

Mr. Nicholas Germanos F-35A Operational Basing EIS Project Manager HQ ACC/A7PS 129 Andrews Street, Suite 337 Langley AFB, VA 23665-2769

Dear Mr. Germanos:

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has reviewed the U.S. Air Force's revised draft Environmental Impact Statement (EIS) on the F-35A Operational Basing (CEQ No. 20130143).

The Air Force proposes to beddown new F-35A aircraft at one or more locations throughout the contiguous U.S. from 2015 to 2020. The Air Force identified Hill Air Force Base and Burlington Air Guard Station as the preferred alternatives for the initial operational beddown.

EPA commends the Air Force's commitment to continue to work with the affected communities to ensure adverse noise impacts are avoided to the greatest extent possible. EPA believes that the draft EIS provides an adequate discussion of the potential environmental impacts and we have not identified any potential environmental impacts requiring substantive changes. EPA has rated the draft EIS as LO – "Lack of Objections." A summary of EPA's rating is enclosed.

We appreciate the opportunity to review the revised draft EIS. The staff contact for the review is Candi Schaedle and she can be reached at (202) 564-6121.

Sincerely,

Susan E. Bromm

Director

Office of Federal Activities

Susant Bonn

Enclosure

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION'

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment